time both species have been taken on the same day and location by several collectors and no other specimens have been taken which could possibly be the opposite sex of either. The author is now convinced that these are the opposite sexes of the same species.

### EUCERCERIS MONTANA Cresson

Eucerceris montanus Cresson, 1882. Amer. Ent. Soc. Trans. 10:viii. 9, 3. Montana.

Cerceris sonorensis Cameron, 1891. Biol. Cent.-Amer., Hym., 2:129. 3. America: Mexico. New Synonymy

The holotype female of *E. montana* Cresson is in the Philadelphia Academy of Natural Sciences, type No. 1946. The holotype male of *C. sonorensis* Cameron is in the British Museum (No. 21.1,435).

# REMARKS ON THE CLASSIFICATION AND NOMENCLATURE OF THE AMERICAN TENEBRIONINE GENUS ADELONIA

(Coleoptera: Tenebrionidae)

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Merotemnus and its only included species, elongatus, were described by Horn in 1870 (p. 367). Not long afterward it was realized that the name of the species was a synonym of Uloma (Adelonia) filiformis Laporte, 1840 (p. 221), and since that time the species has been known as Merotemnus filiformis (Laporte). Somehow the name Adelonia Laporte, 1840 (p. 221), has been ignored, even though filiformis is its monobasic type species. The generic names should also have been synonymized, for they have the same type species through subjective synonymy. In the future, therefore, this species should be called Adelonia filiformis Laporte.

Horn, in his original description, placed the genus in the Ulomini, where it remains to this day. He was probably overly influenced by the superficial ulomine appearance of the species. It is shiny, testaceous, and rather compact, but because of the open coxal cavities he should have considered placement in the Tenebrionini. Tribal differences in the Tenebrionidae are vague in many cases, so I am not able to give characterizations of the Tenebrionini and Ulomini. However, one character seems constant, namely that the tenebrionines have laterally open middle coxal cavities so that the trochantin is visible, whereas the ulomines

have laterally closed middle coxal cavities so that the trochantin is hidden. Once Adelonia is in the Tenebrionini, it must then be placed in the section of the tribe that does not have a membrane between the third, fourth, and fifth visible abdominal sternites. Here we find the genus Rhacius Champion, 1885 (p. 120). If we compare the type species of Rhacius, which is R. sulcatulus Champion, 1885 (p. 121, pl. 6, fig. 9), with Adelonia filiformis, we see little difference except in sculpture. The coarse punctures, the tubercles, the raised elytral intervals, and the dull surface of sulcatulus are the opposites of those found in filitormis, but it should be realized that these characters are of no more than specific rank. The two species have virtually the same body shape, dorsal surface of the head, eyes, antennae, mentum, and legs; it is in these structures that one usually finds generic differences in the Tenebrionini. Finally, the most noticeable, if not the most significant piece of evidence in favor of the union of these two genera, is the presence of the pronounced spine on the middle and hind femora. Surely these two genera would not have been kept separated this long if they had not mistakenly been placed in different tribes. Rhacius should therefore be considered a junior synonym of Adelonia.

Adelonia will now contain 12 species; the following 11 were in Rhacius: baeri (Pic), costipennis (Blair), cylindica (Kulzer), deplanata (Pic), diversipes (Pic), nitida (Gebien), opatroides (Perty), quadricollis (Champion), rufa (Pic), sulcatula (Champion), and vicina (Pic). Of the 12 only three occur north of the Isthmus of Panama, and those three are easily identified.

# KEY TO THE SPECIES OF ADELONIA OF CENTRAL AND NORTH AMERICA

The distribution of *Adelonia filiformis* is recorded in the literature as California and Baja California. Laporte merely listed North America in his original description. Lacordaire's

1859 (p. 333) statement that the species is from Cayenne is certainly an error; he did not know the species except from description. Horn wrote concerning his own specimen, "... presented to Dr. Leconte by Mr. Ulke who received it from California." This specimen is not in the LeConte or Horn Collections. The only other mention of California, except in catalogues, is by Fall in 1901 (p. 173), but he does not give a specific place of capture in that state, and his statement is vague. Nor is there at present a California specimen of the species in the California Academy of Sciences, the University of California, the Museum of Comparative Zoology, the American Museum or Natural History, the Academy of Natural Sciences of Philadelphia, or the United States National Museum. If anyone knows of Californian specimens of Adelonia filiformis, it would certainly be of value to make them known. A rather good record of its distribution in Baja California was given by Blaisdell in 1943 (p. 269). All the exact localities known to me are from the southern half of Baja California, the most northern locality being Santa Rosalia.

Adelonia sulcatula is the most common species in the genus. It is known from Central and South America, the West Indies, and from Texas in the United States. Adelonia quadricollis is recorded from British Honduras, Guatemala, and Columbia. To that list I am able to add Costa Rica on the basis of specimens in the U.S. National Museum.

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